



Australia's Health

This article is based on a report prepared by Dr. W. V. Macfarlane of Australian National University, Canberra, for the Standing Committee on Public Health and Medical Sciences, 10th Pacific Science Congress, Honolulu, Hawaii, August 21–September 7, 1961.

The health problems of 80 percent of the Australian population are those of an urban, industrialized country. The density of population in 70 percent of the country is very low, however, so that distance and climate become important in medical policy.

The vital statistics of Australia's 10 million people resemble those of Britain, United States, Canada, and Scandinavia. In 1960 the birth rate was 22.4 per 1,000 population. The infant mortality rate to 1 year of age was 20.2 per 1,000 live births. The death rate was 8.9 per 1,000 population. In 1955 life expectancy at birth was 67 years for males and 73 years for females.

The three leading causes of death in Australia are the same as those in the United States—diseases of the heart (250 per 100,000 population), malignant neoplasms (133 per 100,000), and vascular lesions of the central nervous system (120 per 100,000). Infectious diseases and infant mortality have lost much of their importance as causes of death because of the effect of improvements in nutrition, sanitation, housing, industrial hygiene, and health education.

Medical services are numerous. There is 1 doctor to 750 population except in the sparsely populated regions. Two new medical schools have recently been established, making seven in all for a population of 10 million.

Public health services are under town, county, state, and federal authorities, with somewhat overlapping responsibilities. Laws dealing

with hospitals, public health notification procedure, and medical services vary from state to state. The federal government subsidizes a national program of medical insurance, pharmaceutical benefits, and Blue Cross-type hospital benefits. Eighty-three local benevolent societies and medical benefits groups share the responsibility for administering these and other national health and welfare programs. About 75 percent of the people have some kind of health insurance.

The infant mortality rate continues to fall slowly while the number of baby health centers, bush nursing centers, and maternal and child welfare units increases.

Most children are inoculated during infancy against diphtheria, whooping cough, and typhoid fever. BCG vaccine is little used. Salk vaccine against poliomyelitis has been produced in Melbourne since 1956, and more than 3 million young people have received three injections. In 1958 the poliomyelitis morbidity rate was down to 1 per 100,000, but it has increased in the following years.

Lung cancer is increasing in incidence more rapidly than any other malignancy. The mortality rate is 16 per 100,000 population (27.5 for males). Cigarette consumption per capita was about three times higher in 1960 than in 1946 and five times higher than in 1920. Higher real income, social custom, and greater social tension are thought to be contributing to the increase in smoking. The smog problem in industrial areas is not yet severe.

Reported incidence of skin cancer is also increasing. Moreover, a survey in Queensland in 1958–60 showed that the real incidence is higher than would be expected from official records of treatment. There are probably more than 300 new cases per 100,000 population each year in Queensland, with about 1,100 new cases

per 100,000 in the Townsville coastal area, latitude 19° S.

Alcoholism is a serious problem in Australia. The yearly per capita consumption of beer has declined, however, from 28 to 26 U.S. gallons per person during the last few years. The conviction rate for drunkenness has also declined. On the other hand, alcoholics as inmates of institutions or as socially deficient people appear to be increasing. Medical attention is being given to the problem by several societies, and research has begun on the detection of acute alcoholism and causes of chronic ill effects.

Adequate psychiatric services are rare, even in the cities. In 1959 there were 38 mental hospitals in Australia, with 32,025 beds. The admission rate has been constant for a decade at 3 per 1,000 population. Chemotherapy and outpatient therapy are increasingly used.

The proportion of older persons in the population is increasing rapidly. The over-65 age group of women represents 10 percent of the female population, and this proportion increases 0.1 percent each year. In 1880 this group represented only 2.1 percent of the population. The problems of providing housing and finding occupational and emotional outlets for older persons are also increasing.

Some housing for the aged has been built in cities. Subsidies of £2 for every £1 contributed are offered by the federal government to voluntary organizations such as Rotary Clubs, Masonic groups, and churches that will build houses for aged people. There is no large movement in this direction as yet; in 1959 subsidies supported the construction of about 1,000 units.

The deserts and wet tropical areas of Australia present special health problems. Malaria has disappeared from the tropics, but several infections, formerly grouped under the term "tropical fevers," have been identified in the last 25 years. These include leptospirosis, scrub

typhus, and Q fever. Fourteen strains of *Leptospira*, four rickettsiae, and 12 arbor virus serotypes have been identified. Since both wild and domestic animals carry the infections, control is difficult.

In Queensland, an increased incidence of tuberculin-positive reactions among young people has been apparent over the past 5 years. Most of these reactions are thought to be caused by a nonspecific organism which does not cause tuberculosis. However, proven tuberculosis has also increased in the tropics, to a rate of 54 cases per 100,000 population, which is 40 percent higher than in the cooler states. BCG is now being given to children in Queensland. Casefinding activities have contributed to the reported increase, but they do not provide the whole answer.

The hazards of the outback are being reduced by better roads and more hospitals. The privately organized Flying Doctor Service, which used to be a purely emergency service, has become a flying general health service. The organization in different states receives 25 to 53 percent of its income from state and federal governments. In the Northern Territory and Queensland, the health departments themselves have begun similar services.

The Flying Doctor Service provides much of the medical care given to aboriginals in missions or settlements. The aboriginals compare very poorly with the white population in life expectancy, infant mortality rate, and rates of infection. Infection with mycobacteria, entamoebae, hookworm, or dysenteric organisms is quite frequent among them. Trauma and malnutrition are also common.

In spite of this the aboriginal population is slowly increasing. As the aboriginals move in toward small towns, many social, economic, and educational questions become intertwined with those of public health.